ORIGINAL



# RECEIVED

1	BEFORE THE ARIZONA CORPORATION COMMISSION
2	GARY PIERCE
3	Chairman  AL CORP COMMISSION  BOB STUMP  Commissioner
5 6	PAUL NEWMAN Commissioner
7	SANDRA D. KENNEDY Commissioner
8	BRENDA BURNS Commissioner
9 10	IN THE MATTER OF THE APPLICATION ) OF ARIZONA-AMERICAN WATER ) DOCKET NO. W-01303A-10-0448 COMPANY, AN ARIZONA )
11	CORPORATION, FOR A  DETERMINATION OF THE CURRENT  FAIR VALUE OF ITS UTILITY PLANT  AND PROPERTY AND FOR INCREASES  O  O  NOTICE OF FILING  TESTIMONY SUMMARIES  O  O  O  O  O  O  O  O  O  O  O  O  O
13 14	IN ITS RATES AND CHARGES BASED ) THEREON FOR UTILITY SERVICE BY ITS ) AGUA FRIA WATER DISTRICT, HAVASU ) WATER DISTRICT, AND MOHAVE )
15	WATER DISTRICT.
16	Attached are testimony summaries for the following witnesses:
17	1. Thomas M. Broderick
18	2. Paul G. Townsley
19	3. Ian C. Crooks
20	4. Joseph E. Gross
21	5. Sandra L. Murrey
22	<ul><li>6. Jeffrey W. Stuck</li><li>7. Miles H. Kiger</li></ul>
23	8. Dr. Bente Villadsen
24	Arizona Corporation Commission
25	10. Kevin Tilden
26	11. Gregory A. Barber
	12. Troy Day
	2323290.1

# RESPECTFULLY SUBMITTED this 30th day of November, 2011.

#### LEWIS AND ROCA LLP

Thomas H. Campbell
Michael T. Hallam
40 North Central Avenue

Phoenix, AZ 85004 Attorneys for Arizona-American Water

Company

ORIGINAL and thirteen (13) copies of the foregoing filed this 30th day of November, 2011, with:

11 The Arizona Corporation Commission Utilities Division – Docket Control 1200 W. Washington Street Phoenix, Arizona 85007

13 14

1

2

3

5

6

7

8

9

10

Copy of the foregoing hand-delivered this 30th day of November, 2011, to:

15

16

17

Steve Olea
Utilities Division
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, Arizona 85007

18 19

Dwight D. Nodes, Administrative Law Judge Hearing Division

20 Ar

Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007

21

Janice Alward, Chief Counsel Charles Hains

23

Legal Department Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007

2526

Commissioner Gary Pierce, Chairman Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007 Commissioner Paul Newman Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007

Commissioner Sandra D. Kennedy Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007

Commissioner Bob Stump Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007

Commissioner Brenda Burns Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007 John LeSueur Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007

1 2	Nancy LaPlaca Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007	Amanda Ho Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007
3 4 5	Cristina Arzaga-Williams Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007	Tom Galvin Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007
6 7	Copy of the foregoing mailed this 30th day of November, 2011, to:	
8	Michelle Wood Residential Utility Consumer Office 1110 W. Washington Street, Suite 220 Phoenix, AZ 85007	Michael D. Bailey James Gruber Surprise City Attorney's Office 16000 N. Civic Center Plaza Surprise, AZ 85374
10 11	Joan S. Burke Law Office of Joan S. Burke 1650 N. First Ave Phoenix, AZ 85003 Attorney for Corte Bella	Craig and Nancy Plummer 17174 W. Saguaro lane Surprise, AZ 85388
13	Greg Patterson, Director Water Utility Association of Arizona 916 W. Adams, Suite 3	Sharon Wolcott 20117 N. Painted Cove Lane Surprise, AZ 85387 Timothy L. & Cindy J. Duffy
14 15 16 17	Phoenix, AZ 85007  Michele L. Van Quathem Ryley Carlock & Applewhite, P.A. One North Central, Suite 1200 Phoenix, AZ 85004-4417 Attorneys for Verrado and DMB	19997 N. Half Moon Drive Surprise, AZ 85374 Jared Evenson, President Cross River Homeowners Association 1600 W. Broadway Road, Suite 200 Tempe, AZ 85282
18 19 20	Curtis S. Ekmark Jason Wood Ekmark & Ekmark, LLC 6720 N. Scottsdale Road, Suite 261 Scottsdale, AZ 85253 Attorneys for HOA Class	Gary D. Hays The Law Offices of Gary D. Hays 1702 E. Highland Avenue Phoenix, AZ 85016 Attorney for Cross River HOA
21	Frederick G. Botha and Mary L. Botha 23024 N. Giovota Drive Sun City West, AZ 815375	William and Erin Parr 18044 W. Georgia Ct. Litchfield Park, AZ 85034
23	Peter and Rochanne Corpus 8425 N. 181st Drive Waddell, AZ 85355	Thomas & Laurie Decatur 8426 N. 181st Drive Waddell, AZ 85355
<ul><li>24</li><li>25</li></ul>	Scott T. Waterhouse 18550 W. Kolina Lane Waddell, AZ 85355	Mike Albertson 6634 N. 176th Avenue Waddell, AZ 85355

Jay L. Shapiro Patrick J. Black Fennemore Craig, P.C. 3003 N. Central Ave., Suite 2600 Phoenix, AZ 85012 Attorneys for EPCOR Water (USA)

but spelled

Brian O'Neal 21373 W. Brittle Bush Lane Buckeye, AZ 85396

#### Testimony Summary for Thomas M. Broderick:

#### DIRECT TESTIMONY

The three district total requested revenue increase is \$20.8 million and the test year is the period ending June 30, 2010.

This case includes the water districts of Agua Fria, Havasu and Mohave.

The Company has continued to make necessary capital investments to adequately provide water and wastewater service to its customers, and it has experienced increases in its operations and maintenance expenses since the (previous) 2007 test year for these districts. The Company is also eligible – due to the passage of time – to include capital investments in rate base occurring more than ten years ago pursuant to an earlier agreement with the Commission regarding imputed regulatory contributions.

The primary increased investment and expenses in the two and one-half years since the previous test years for these districts include:

- 1) Additional original cost utility plant in service totaling \$74 million (3 district total), including the White Tanks Regional Treatment Plant in the Agua Fria district;
- 2) Additional amortization of imputed regulatory contributions totaling \$2.067 million (3 district total);
- 3) Additional depreciation expense associated with additional original cost utility plant in service);
- 4) Increased labor and labor related expenses associated with increased activities across many functions.

Arizona-American's cost of capital is not less than 8.3%. The average cost of long-term debt is 5.66% and the cost of equity is 11.50%. A hypothetical equity ratio of 45.34% and a debt ratio of 54.66% are proposed as a necessary component of financial recovery.

Arizona-American's proposed rate case expense is \$529,210.

#### REBUTTAL TESTIMONY

After reviewing the Company's application, Commission Staff supports a rate increase of \$14,494,383 for the Agua Fria, Havasu, and Mohave Water Districts. RUCO supports a rate increase of \$10,910,705. The Company's application requested a rate increase of \$20,393,628, and while Staff and RUCO support lower amounts, nevertheless the Company is appreciative of Staff and RUCO's time and effort to review the application and arrive at their recommendations.

#### **Testimony Summary for Thomas M. Broderick:**

#### Page 2

The Company continues to recommend a hypothetical capital structure excluding short term debt; nevertheless, an updated (over \$3 million lower) balance of short term debt as of June 30, 2011 is set forth in Rebuttal Exhibit TMB-I, if the Commission is so inclined to include short term debt in the cost of capital for ratemaking purposes. The Company continues to reduce its short term debt, and it will continue to provide updated balances of actual outstanding short term debt balance as this case progresses. There are no new significant construction projects underway, so short term debt is declining.

Staff reviewed and concurred with the Company's interpretation of Decision No. 69914 that the deferral of post-in-service AFUDC and depreciation are to be calculated through the date when rates in this case are implemented in order to comply with that decision. The deferral balance is \$8,799,456 as of June 30, 2011.

This rate case was filed timely and did not result in the White Tanks deferrals being greater than they otherwise would have been. The White Tanks post-in-service AFUDC should be calculated at the authorized cost of capital and not at the short term debt rate. The White Tanks O&M deferral was authorized by the Commission and the Company has proposed a good deal for customers by not including the unamortized O&M deferral balance in rate base so long as it is recovered over not more than three years.

The Company is opposed to a phase-in of rates in this case.

The Company had an error in Agua Fria Schedule A-2 such that 2008 earnings were overstated by twice the correct amount. This is corrected in Agua Fria Schedule A-2 Rebuttal.

### REJOINDER TESTIMONY

The Company is proposing low income tariffs for the Agua Fria, Mohave, and Havasu Water Districts which comply with Decision No. 71410.

The current amount of short term debt as of July 31, 2011 is \$50,881,000. As a result, using Commission Staff's definition which includes short term debt, the portion of Company's capital structure represented by debt as of July 31, 2011, is down to 59.55%.

The unamortized balance of White Tanks Plant related deferrals is \$ 9,313,992 as of July 31, 2011.

Mr. Arndt's surrebuttal testimony contains numerous errors which undermine the accuracy of Mr. Arndt's testimony. Mr. Broderick discusses in detail the history of hook-up fees relating to the White Tanks Plant and the Company's notification of the Commission of the changes in the collection of hook-up fees.

Mr. Broderick discusses the forecasts made by Arizona's leading economists during the time before and after the Company was constructing the White Tanks Plant. Those forecasts support the prudency of the Company's decisions.

The Company continues to have concerns about Staff's rate design and requests that Staff be more forthcoming with its specific goals regarding water use efficiency and how that is captured in its rate design proposals.

## Testimony Summary for Thomas M. Broderick:

#### Page 3

#### SECOND REBUTTAL TESTIMONY

As of the most recently available date of September 30, 2011, the Company's short-term debt balance was \$44,598,345. The Company's retained earnings have also been updated as of September 30, 2011 and likewise reflect an improvement from the test year-end balance. The total effect of these changes results in an updated capital structure of 41.27% equity and 58.73% debt proposed for ratemaking purposes. The Company's proposed updated weighted cost of capital is 7.48%, which is a reduction from its original proposed 8.30%.

Mr. Broderick also updates the White Tanks deferrals, which increases Agua Fria's proposed rate base by \$3,439,075. The annual amortization of the updated total White Tanks Plant related deferrals likewise increases to \$524,500.

Mr. Broderick rebuts Mr. Watkins claims that the Company is seeking to recover 126% of its investment in the White Tanks plant. He also clarifies that the advanced wells require refunding by the Company.

Mr. Broderick provides additional information about predictions made by Arizona's leading economists about job growth in the post 2006 period.

Mr. Broderick will adopt portions of the pre-filed direct testimony of Linda J. Gutowski, as follows:

Rate Case Expense: Adjustment LJG-10 spreads the estimated rate case expense among the 28 districts in this case. No residuals for prior cases are requested.

Line 21 Clean Up: Adjustment LJG-14 adjusts all districts for those items such as charitable 6 contributions that the Commission has traditionally not allowed in rates.

#### Testimony Summary for Paul G. Townsley:

#### DIRECT TESTIMONY

Arizona-American has taken many steps to prevent further deterioration of its financial condition including not paying a dividend to its shareholders, reducing capital expenditures to below internally-generated funds, reducing staffing, and reducing other costs of the business, but that rate relief is critical. The current rate application seeks timely and adequate rate relief.

This is the most critical part of our strategy to restore Arizona-American's long-term financial health by closing the ROE Gap between actual ROE and Commission authorized ROE.

An Infrastructure System Replacement Surcharge Program (ISRS) will benefit customers in older service areas such as Mohave and Havasu water districts where infrastructure is reaching the end of its useful life and larger levels of capital investment, coupled with the lag associated with historic test years, will result in larger step increases in rates at the time new rates are approved by the Commission. Using the ISRS program, once reinvestments are made in qualifying infrastructure, rates would be raised gradually and in smaller steps.

American Water's corporate responsibility program is ingrained in every aspect of our operations, from how we advance innovation in water treatment and delivery and serve our customers, to how we demonstrate ethical business standards and focus on employee success, to how we protect the most precious of all natural resources -- water. This program provides benefits to customers of Arizona-American.

## **REBUTTAL TESTIMONY**

The White Tanks Plant is a prudent investment, is used and useful and is providing service to our customers in Arizona-American's Agua Fria Water District, and should be approved in rate base by the Commission.

ISRS will enable the Company to make investments in the Mohave Water and Havasu Water districts to replace older infrastructure which will help reduce Unaccounted For Water and do so in a way that the perceived rate shock to our customers is mitigated.

#### REJOINDER TESTIMONY

Arizona American acted prudently in the design, construction, and operation of the White Tanks Surface Water Treatment Plant and recommends the Commission find that the White Tanks Plant is used and useful and that it be included in rate base for the purpose of setting new rates for Arizona-American's Agua Fria Water District.

An Infrastructure System Replacement Surcharge (ISRS) will provide for the systematic replacement of aged infrastructure in a manner that does not lead to the amount of perceived rate shock that would be encountered under traditional ratemaking procedures, and recommends the Commission adopt it in this case for the Mohave and Havasu Water Districts.

#### SECOND REBUTTAL TESTIMONY

Mr. Townsley rebuts certain positions of the Class of Homeowner Associations' witnesses Mr. Watkins and Mr. Shaw.

Mr. Townsley discusses the financial condition of the Company and the consequences of a significant disallowance of the White Tanks Plant on Arizona-American.

## **Testimony Summary for Ian C. Crooks:**

## DIRECT TESTIMONY

The gross amount of actual White Tanks Plant O&M expense deferred before subtraction of cost savings resulting from the production shifts from wells to White Tanks Plant was \$671,765 through June 30, 2010. The gross amount of actual cost savings resulting from operating the White Tanks Plant was \$121,248 as of June 30, 2010. The net deferral, therefore, as of June 30, 2010 is \$550,842. This is not the total amount of the White Tanks O&M net deferral being requested for recovery in rates in this case because O&M expense continues to be incurred and deferred until new rates are effective and the deferral's recovery commences.

The Company has included the net deferral amounts through the period November 30, 2011, the date estimated for when new rates in this case will be implemented. Total gross White Tanks Plant O&M expense from in-service through November 30, 2011, is currently estimated to be \$3,057,025, the gross realized production savings to be \$639,890, and the authorized cost of accrued interest at the prevailing short-term interest rate to be \$24,672, for a net total deferral of \$2,441,807.

The Company is proposing two changes to irrigation class customers. First, the Company seeks to modify the format of the existing tariff to provide clarity to the customers and Company regarding irrigation use. The proposed tariff will clearly explain to the customers and Company the availability, applicability, special conditions, rates, and terms and conditions for irrigation service. Second, the Company proposes through rate design to expand the irrigation class from a single tier rate with no minimum monthly charge to a single tier rate but with a minimum monthly service charge based on meter size.

The tank maintenance plan for the Agua Fria Water District is based on a 15-year schedule for recommended repairs and painting. The estimated yearly maintenance expense annualized over the 15-year cycle is estimated to be \$376,478. It is anticipated that this estimated expense would be available for review and adjustment when necessary in subsequent Agua Fria Water District rate cases.

#### REBUTTAL TESTIMONY

The White Tanks Plant has been operational since November 2009 and is operating effectively on a firm capacity basis of 13.4 MGD and a total capacity basis of 20 MGD. Mr. Crooks shows the actual operating history of the White Tanks Plant to support his position.

Mr. Crooks also rebuts certain portions of the direct testimony submitted by RUCO witnesses Thomas Fish and Royce Duffett regarding the White Tanks Plant.

The tank maintenance program funding mechanism proposed by Arizona-American is appropriate and consistent with a recent Commission decision on this topic and rebuts Sun City Grand witness Michael Arndt.

#### **Testimony Summary for Ian C. Crooks:**

#### Page 2

The proposed changes to the water irrigation tariff are appropriate, and Mr. Crooks explains why the Company is proposing these changes.

#### REJOINDER TESTIMONY

RUCO witnesses Dr. Fish and Mr. Duffett continue to use misleading calculations to support their disallowance of fifty percent of the White Tanks Plant.

A tank maintenance program for the Agua Fria, Mohave and Havasu districts will permit the Company to conduct the same annual tank maintenance program in its Agua Fria Water District, its Mohave Water District, and its Havasu Water District that it has begun in its Sun City Water District.

White Tanks Plant water is only delivered through transmission mains to Agua Fria water plants 4,5,8, and 9, and only well water is delivered to Agua Fria water plants 1,2, and 3.

#### SECOND REBUTTAL TESTIMONY

Ian C. Crooks rebuts certain portions of the direct testimony submitted by Class of Homeowners Associations' witnesses Glenn A. Watkins and John Shaw regarding the Agua Fria District and White Tanks Plant.

Mr. Crooks will adopt portions of the pre-filed direct testimony of Linda J. Gutowski, as follows:

White Tanks Expenses: Adjustment LJG-20 adjusts the Agua Fria Water District to normalize certain expenses between the non-White Tanks portion of Agua Fria and the White Tanks portion of Agua Fria that were not addressed in the above adjustments.

#### **Testimony Summary for Joseph E. Gross:**

## **DIRECT TESTIMONY**

The following major capital projects were completed well before the end of the test year and are included in the requested rate base:

- White Tanks Regional Water Treatment Plant (Agua Fria)
- Sierra Montana Storage Tank (Agua Fria)
- Route 303 Waterline Relocation (Agua Fria)
- Big Bend Acres Storage Tank (Mohave)

The Company is also requesting the inclusion in rate base of one post-test year project, the Lake Mohave Highlands Storage Tank.

#### White Tanks Regional Water Treatment Plant (Agua Fria)

At a total project cost of \$63.9 million, the White Tanks Regional Water Treatment Plant was placed in service November 30, 2009. This was the culmination of a regional planning process dating back to the mid 1990s. Annual ground water savings in the first year of the Plant's operation are estimated to be three billion gallons.

This plant has allowed the Company to aggressively pursue the reduction of future wells in the Agua Fria Water District. Arizona-American is coordinating with MWD to provide portions of its Agua Fria River water allocation to developers for treatment and delivery to Arizona-American's future customers residing within the Agua Fria Water District. Arizona-American estimates that this agreement would result in up to 21,000 acre-feet per year of additional surface water being available for direct treatment and delivery at build-out of the Agua Fria Water District. This initiative will also eliminate the need for associated groundwater treatment facilities required to address the contaminants prevalent in the Agua Fria Water District, such as arsenic, nitrates, and fluorides. Significant future O&M costs for treatment plants will also be avoided.

## Sierra Montana Storage Tank (Agua Fria)

The 2.2 million gallon Sierra Montana Storage Tank was placed in service on December 8, 2008 to increase storage capacity at Arizona-American's Water Plant 8. The added capacity was needed to address an existing storage capacity deficit in the service area and accommodate additional water supplies from Waddell Haciendas Well and from Water Plant 4. This additional storage capacity also allowed Water Plant 8 to meet projected summer peaking demands of 3.5 MGD, in addition to fire-flow requirements. The total project cost for this storage tank was \$1,796,175.

#### Route 303 Waterline Relocation (Agua Fria)

The Arizona Department on Transportation (ADOT) embarked on a major upgrade of Route 303 in the fall of 2008. ADOT required relocation of the Company's waterlines at the Company's expense in locations where the ADOT right of way pre-dated the installation of the Company's waterline. To minimize customer costs, the Company contracted with the firms

#### Testimony Summary for Joseph E. Gross:

#### Page 2

retained by ADOT to design and construct the intersection crossings. The relocation project 1 design began in September 2008, and was placed into service on March 31, 2010, at a total project cost of \$372,727.

#### Big Bend Acres Storage Tank (Mohave)

The Company completed a comprehensive planning study of the Mohave Water District in 2008. The study identified an urgent need to replace the aging 125,000 gallon bolted steel tank, the Big Bend Acres Storage Tank, which had severe deterioration and leaking in its lower section. There was also an existing storage deficit in that water zone of approximately 1.71 million gallons. This deficit will be partially addressed by the new 250,000 gallon tank, which was placed into service on November 26, 2008 at a total project cost of \$643,834.

## Lake Mohave Highlands Storage Tank (Mohave)

The Lake Mohave Highlands Storage Tank resulted from the Company's comprehensive planning study of the Mohave Water District. The existing welded steel tank is approximately forty years old and is seriously corroded, with a capacity of 110,000 gallons. The total storage requirement for this zone is 143,381 gallons. The tank cannot be taken off-line for further examination and possible repairs, since there is no other storage available. A 150,000 gallon welded steel tank is expected to be completed in March 2011 at an approximate total project cost of \$660,171.

#### REBUTTAL TESTIMONY

Joseph E. Gross rebuts the direct testimony of Ms. Hains relating to the disallowance of certain plant components at the White Tanks Plant.

Mr. Gross also rebuts Ms. Hains' testimony relating to the fluoride injection system and sodium fluoride injection.

Mr. Gross explains why the use of the CAP allocation by Dr. Fish to calculate a daily production figure is not meaningful. He also explains in detail why the 2.45 MG of on-site finished water storage does not restrict plant production as Dr. Fish claims. Next, Mr. Gross rebuts Dr. Fish's reliance on the MWD proposal for the White Tanks Plant and the claim that the Plant is not a regional facility.

Mr. Gross rebuts the testimony of Mr. Duffett relating to the capacity of the White Tanks Plant and explains why the Company's CAP allocation does not support a determination of how much of the White Tanks Plant is used and useful.

Mr. Gross rebuts RUCO's recommendation that the Commission disallow inclusion in rate base of the Sierra Montana Reservoir, the Big Bend Acres Storage Tank and the Lake Mohave Highlands Storage Tank.

## **Testimony Summary for Joseph E. Gross:**

## Page 3

## REJOINDER TESTIMONY

Mr. Gross addresses comments made by Staff witness Ms. Hains in her surrebuttal testimony and comments made by RUCO witness Dr. Fish concerning the Lake Mohave Highlands Tank project.

## SECOND REBUTTAL TESTIMONY

- Mr. Gross rebuts the direct testimony of Glenn A. Watkins relating to the White Tanks Regional Water Treatment Plant (WTRWTP) being used and useful.
- Mr. Gross also rebuts Mr. Watkins' testimony relating to the permitted capacity of the WTRWTP.
- Mr. Gross further rebuts Mr. Watkins' testimony referring to the WTRWTP as a stand alone facility.
- Mr. Gross rebuts the direct testimony of John Shaw, P.E. regarding the cost of surface water treatment in Agua Fria Water District compared to the cost of recharge and recovery.
- Mr. Gross also rebuts Mr. Shaw's testimony alleging that the WTRWTP can only treat 9.9 million gallons per day (mgd) of CAP surface water.

## DIRECT TESTIMONY

#### SPONSORED SCHEDULES

- Schedule A-4: Construction Expenditures on Gross Utility Plant in Service
- Schedule B-1: Summary of Fair Value Rate Base
- Schedule B-2: Original Cost Rate Base Pro Forma Adjustments
- Schedule B-5: Computation of Working Capital
- Schedule B-6: Lead/Lag Study Working Cash Requirement
- Schedule E-1: Comparative Balance Sheets
- Schedule E-5: Detail of Plant in Service
- Schedule F-3: Projected Construction Requirements

#### **SPONSORED ADJUSTMENTS**

# Rate Base Adjustments:

Summary of Rate Base Schedules B-1 through B-6

## **Table 1 – Summary of Rate Base**

<b>Total All Districts</b>	\$148,912,335
Mohave Water	\$ 11,312,680
Havasu Water	\$ 3,615,955
Agua Fria Water	\$133,986,700
<u>District</u>	<u>OCRB</u>

#### Common Rate Base Adjustments

Adjustment SLM-1 adjusts Accumulated Depreciation for (Over)/Under Depreciation from the last case to the end of the test year in this case.

Adjustment SLM-2 allocates the Corporate, or Common, Plant and Accumulated Depreciation to each of the districts based on the 4-Factor Allocations for 2010.

Adjustment SLM-3 removes the Deferred Debits that are not afforded rate base treatment.

Adjustment SLM-4 decreases the Contributions in Aid of Construction balance associated with developer-funded projects that are still in Construction Work in Progress ("CWIP") and not included in rate base.

## Page 2

## **District Specific Rate Base Adjustments:**

Agua Fria Water Rate Base Adjustments: ADJ SLM-5 to adjust for Staff removals per Decision No. 67093.

Havasu Water Rate Base Adjustments: ADJ SLM-5 to adjust for Staff removals per Decision No. 67093 and ADJ SLM-6 to adjust for Staff GWB-5 AIAC portion only of Gateway transfer in Decision No. 71410.

Mohave Water Rate Base Adjustments: ADJ SLM-5 to adjust for Staff removals per Decision No. 69440 and ADJ SLM-6 to adjust for Staff GWB-5 AIAC portion only of Gateway Transfer approved in Decision No. 71410.

## **Income Statement Adjustments:**

Adjustment SLM-1 Annualize Depreciation.

Adjustment SLM-2 Interest Synchronization.

#### REBUTTAL TESTIMONY

Sandra 1. Murrey responds to Staff and RUCO testimony concerning certain rate base issues and several operating expenses items.

# RATE BASE - CASH WORKING CAPITAL

The Company proposes a new lead/lad day for Management Fees per Staff's recommendation.

The Company opposes Staff's exclusion of Management Fees in the Working Capital calculation.

# RATE BASE ADJUSTMENTS

#### Agua Fria Water District

The Company is proposing an adjustment to update rate base for the purchase of six vehicles.

The Company opposes the following Staff recommendations:

- Disallow \$298,399 for excess capacity at the White Tanks Plant (Staff adj #2),
- Disallow \$321,906 for fluoride injector equipment at the White Tanks Plant (Staff adj #1)Reduction to White Tanks deferral of \$261,018 (Staff adj #6).

#### Page 3

The Company accepts Staff's adjustments for Rancho Cabrillo Phase 1 (Staff adj #3), Rancho Cabrillo Parcels A & B (Staff adj #4), and White Tanks Parcels 3 & 9 Improvements (Staff adj #5).

The Company opposes the following RUCO adjustments:

- Fifty percent disallowance of the White Tanks Plant (RUCO adj #7),
- Fifty percent disallowance of Sierra Montana Storage Tank (RUCO adj #8),
- Disallowance of one vehicle (RUCO adj #4),
- Customer security deposit (RUCO adj #3)

## Havasu Water District

The Company proposes to reclassify non-media equipment and to record the transfer to equipment to the Havasu Water District.

The Company opposes RUCO adjustment to Customer Security Deposits (RUCO adj #3)

#### Mohave Water District

The Company accepts the following Staff adjustments:

- Disallow Montano Ridge Estates (Staff adj #I),
- Update value of dump truck (Staff adj #2),

The Company opposes the following RUCO adjustments:

- Disallowance of the Big Bend Acres Storage Tank (RUCO adj #5),
- Disallowance of the Lake Mohave Highland Storage Tank (RUCO adj #6),
- Customer Security Deposit (RUCO adj #3).

#### OPERATING EXPENSES LABOR AND LABOR RELATED EXPENSES

The Company updates various expenses to reflect actual pay increases that had been estimated.

#### **DEPRECIATION EXPENSE**

The Company does not agree with Staffs exclusion of the cost of removal component from the proposed depreciation rates.

## Page 4

## **REJOINDER TESTIMONY**

Sandra L. Murrey responds to Staff and RUCO surrebuttal testimony concerning certain rate base issues.

## Rate Base - Cash Working Capital

All Districts - The Company accepts Staff's recommendation of 18.16 lag days for the Management Fees category.

## Agua Fria Water District

The Company adjusts \$100,000 for a typo on a mutually agreed upon adjustment.

The Company opposes RUCO's surrebuttal adjustment of fifty percent disallowance of deferred debits associated with the RUCO's proposed fifty percent disallowance of the White Tanks Plant.

#### Mohave Water District

The Company adjusts the project cost for Lake Mohave Highland Storage Tank.

## SECOND REBUTTAL TESTIMONY

Sandra L. Murrey testifies as follows:

#### **Sponsored Second Rebuttal Schedules**

Ms. Murrey sponsors the following schedules for each district in the case:

- Schedule B-1 Second Rebuttal Summary of Fair Value Rate Base
- Schedule B-2 Second Rebuttal Original Cost Rate Base Pro Forma Adjustments
- Schedule B-5 Second Rebuttal Computation of Working Capital
- Schedule B-6 Second Rebuttal Lead/Lag Study Working Cash Requirements

# Rate Base

Arizona-American's second rebuttal position for Rate Base is:

Agua Fria Water	Havasu Water	Mohave Water
\$137,444,999	\$3,589,385	\$11,417,384

#### Page 5

# Rate Base Adjustments

Ms. Murrey sponsors the following necessary second rebuttal adjustments to rate base in all districts:

• ADJ SLM-1RB2 — Working Capital

## **Operating Income Adjustments**

Ms. Murrey sponsors the following necessary second rebuttal adjustments to operating income in all districts, except where noted:

- ADJ SLM-1RB2 Federal and State Income Tax
- ADJ SLM-2RB2 Interest Synchronization
- ADJ SLM-3RB2 Annualize Depreciation (Agua Fria Water only)

## **Other**

Ms. Murrey sponsors Second Rebuttal Exhibit SLM-1 which illustrates the potential revenue impact of estimated water loss improvement for Havasu Water and Mohave Water districts.

Ms. Murrey will adopt portions of the pre-filed direct testimony of Linda J. Gutowski, as follows:

<u>Labor Expense Adjustment</u> LJG-1 adjusts all districts for Labor Costs using the test year employees less employees lost plus employees added at the January 1, 2011 payroll rates. Also included is an adjustment for payroll taxes (FICA, FUTA and SUTA).

Group Insurance Expense Adjustment LJG-7 restates Group Insurance Expense to the 2010 monthly amounts.

OPEBs Expense Adjustment LJG-8 annualizes the OPEB expense in each of the districts.

Pensions Expense Adjustment LJG-9 adjusts Pensions Expense for the latest known and measurable ERISA expense for both Arizona-American and Service Company including the adjustment for the Defined Contribution Plan (DCP) for new hires since 1/1/2005 who are not eligible for a defined pension.

Rate Case Expense Adjustment LJG-10 spreads the estimated rate case expense among the districts in this case. No residuals for prior cases are requested.

<u>Insurance Other than Group Adjustment</u> LJG-11 adjusts all districts for the latest known information for the cost of the various Insurance Other than Group policies.

#### Page 6

<u>Postage Expense Adjustment</u> LJG-12 adjusts all districts for the postage increase 1 of January 2, 2011 per the USPS website.

Rents Expense Adjustment LJG-13 adjusts all districts downward for the various changes in rental expense, primarily for the Phoenix Corporate office, which decreased.

<u>Line 21 Clean Up Adjustment</u> LJG-14 adjusts all districts for those items such as charitable contributions that the Commission has traditionally not allowed in rates.

401K Expense Adjustment LJG-15 adjusts all districts for the Company's portion of 401k payments.

<u>Federal & State Income Tax Expense Adjustment</u> LJG-18 adjusts all districts to calculate test year pro forma present rate income tax expense and pro forma proposed rate income tax expense.

Remove Other Income & Deductions Adjustment LJG-19 adjusts all districts to remove the other income and deductions from the income statement.

#### Testimony Summary of Jeffrey W. Stuck:

## DIRECT TESTIMONY

Mr. Stuck testifies as follows:

The Havasu Water District covers approximately 3,486 acres (5.45 square miles). The Havasu Water District's water production facilities include three production wells, five ground level storage tanks, five booster pump stations, and five pressure regulating valves.

The Mohave Water District is located within Bullhead City and unincorporated areas of Mohave County. The overall service area covers approximately 17,397 acres (27.19 square miles). There are approximately 15,800 customers in the District. The Mohave Water District has one operating center and five separate water systems.

The Company has a tank maintenance plan for the Mohave Water District and Havasu Water District. The Mohave Water District has seventeen tanks included in this plan with a maintenance plan duration of fifteen years. The Havasu District has five tanks included in this plan with a maintenance plan duration of nine years. All of the tanks included in this overall plan are constructed of steel and are in need of interior and exterior recoating. Many will require structural repairs as well.

The total anticipated cost for each of the Districts is as follows:

- \$3,669,120 for the Mohave Water District, and
- \$763,200 for the Havasu Water District.

The Company is requesting that the recommended tank maintenance operation and maintenance expense in this case include an annual amount of \$244,608 for the Mohave Water District and \$76,320 for the Havasu Water District.

#### DIRECT TESTIMONY

Due to continued declining residential usage per customer that precludes Arizona-American from earning its Commission authorized revenue requirement, a declining residential usage adjustment to test year residential usage is being proposed for the districts in this case. Significant residential conservation has been occurring in Arizona-American's water districts for some time now and an adjustment to preserve the Company's revenue requirement is fair and necessary.

The Company is proposing to move some of its irrigation customers to a new proposed potable irrigation rate that includes a basic service charge, as well as create three new non-potable irrigation rates that reflect desired usage incentives in its Agua Fria Water district.

## **Sponsored Schedules**

Mr. Kiger sponsors the following schedules for each district in the case:

- Schedule A-5 Arizona-American Summary Statements of Cash Flows
- Schedule C-1 Arizona-American Adjusted Test Year Income Statement
- Schedule C-2 Arizona-American Income Statement Pro Forma Adjustments
- Schedule C-3 Arizona-American Gross Revenue Conversion Factor
- Schedule E-2 Comparative Income Statements
- Schedule E-3 Comparative Statement of Changes in Financial Position
- Schedule E-6 Comparative Operating Income Statements
- Schedule E-6a Comparative Operating Income Statements
- Schedule E-7 Operating Statistics
- Schedule E-8 Taxes Charged to Operations
- Schedule F-1 Projected Income Statements
- Schedule F-2 Projected Statements of Changes in Financial Position
- Schedule H-1 Summary of Revenues by Customer Classification Present & Proposed Rates
- Schedule H-2 Analysis of Revenue by Detailed Class
- Schedule H-3 Changes in Representative Rate Schedules
- Schedule H-4 Typical Bill Analysis
- Schedule H-5 Bill Count

#### Page 2

# **Operating Income Adjustments**

Mr. Kiger sponsors the following necessary adjustments to operating income:

- Adjustment MHK-1 Remove Unbilled Revenue
- Adjustment MHK-2 Annualize Rate Increase
- Adjustment MHK-3 Annualize Year End Customers
- Adjustment MHK-4 Correct Billing Errors
- Adjustment MHK-5 Declining Usage Adjustment
- Adjustment MHK-6 Annualize Power Expense
- Adjustment MHK-7 Annualize Property Taxes

## **REBUTTAL TESTIMONY**

#### **Declining Usage Adjustment**

Arizona-American Water Company reiterates its support for a declining usage adjustment. Declining residential usage per customer prohibits Arizona-American from earning its Commission authorized return. Even greater residential usage decline has been observed in the 12 months since the end of the test year, which contradicts the claims of other parties that residential conservation possibilities had been maximized by the end of the test year. Arizona-American continues to support its declining usage adjustment as originally filed, and furthermore intends to supplement its rebuttal rate design filing with updated billing determinants through the most recent 12 month period (June 30,2011), assuming the data become available and a complete bill analysis can be timely included in my rejoinder testimony.

#### **Proposed Rate Increase Request**

Arizona-American's rebuttal proposed rate increase request is:

District	Agua Fria Water	Havasu Water	Mohave Water	Total
Proposed Rate Increase Req.	\$17,783,152	\$700,444	\$2,306,731	\$20,790,327

Page 3

# **Adjusted Operating Income**

Arizona-American's rebuttal position for Adjusted Operating Income is:

District	Agua Fria Water	Havasu Water	Mohave Water
Adjusted TY Operating Income	\$497,345	\$(122,470)	\$(425,423)

## **Adjusted Operating Expense**

Arizona-American's rebuttal position for Adjusted Operating Expense is:

District	Agua Fria Water	Havasu Water	Mohave Water
Adjusted TY Operating Income	\$23,594,258	\$1,388,536	\$5,329,683

## **Sponsored Rebuttal Schedules**

Mr. Kiger sponsors the following schedules for each district in the case:

- Schedule C-I Rebuttal- Arizona-American Adjusted Test Year Income Statement
- Schedule C-2 Rebuttal- Arizona-American Income Stmt Pro Forma Adjustments
- Schedule C-3 Rebuttal- Arizona-American Gross Revenue Conversion Factor

#### **Operating Income Adjustments**

Mr. Kiger sponsors the following necessary rebuttal adjustments to operating income in all districts, except where noted:

- Adjustment MHK-1R Remove Effluent Customer Revenues (Agua Fria)
- Adjustment MHK-2R":: Purchased Water Annualization (Agua Fria)
- Adjustment MHK-3R Fuel & Power Expense Annualization (Agua Fria & Mohave)
- Adjustment MHK-4R Chemicals Expense Annualization (Agua Fria & Havasu)
- Adjustment MHK-5R Management Fees Labor Annualization
- Adjustment MHK-6R Management Fees Other Expense Annualization

## Page 4

- Adjustment MHK-7R Management Fees Remove One-Time Charges (Mohave)
- Adjustment MHK-8R Rate Case Expense
- Adjustment MHK-9R Accept Staffs Bad Debt Expense Method
- Adjustment MHK-1OR Accept Staffs Water Testing Expense (Agua Fria)
- Adjustment MHK-11R- Property Taxes

## **REJOINDER TESTIMONY**

Miles H. Kiger testifies as follows:

## **Declining Usage Adjustment**

Arizona-American Water Company is pleased that Staff has embraced its residential declining usage adjustment based on the known and measurable post-test year usage results. The Company is prepared to satisfy reasonable annual compliance reporting obligations related to the declining usage adjustment. Because the declining residential usage trend has been as persistent as it has over the last 5 1/2 years the Company expects the declining usage will continue and that an adjustment will be a feature of its future rate filings.

# **Proposed Rate Increase Request**

Arizona-American's rejoinder proposed rate increase request is:

District	Agua Fria Water	Havasu Water	Mohave Water	Total
Proposed Rate Increase Req.	\$17,764,746	\$744,250	\$2,292,753	\$20,801,749

## **Adjusted Operating Income**

Arizona-American's rejoinder position for Adjusted Operating Income is:

District	Agua Fria Water	Havasu Water	Mohave Water
Adjusted TY Operating Income	\$420,976	\$(148,829)	\$(425,405)

## Page 5

## **Adjusted Operating Expense**

Arizona-American's rejoinder position for Adjusted Operating Expense is:

District	Agua Fria Water	Havasu Water	Mohave Water
Adjusted TY Operating Income	\$23,670,627	\$1,414,896	\$5,329,997

#### Sponsored Rejoinder Schedules

Mr. Kiger sponsors the following rejoinder schedules for each district in the case:

- Schedule C-1 Rejoinder Arizona-American Adjusted Test Year Income Statement
- Schedule C-2 Rejoinder Arizona-American Income Stmt Pro Forma Adjustments
- Schedule C-3 Rejoinder Arizona-American Gross Revenue Conversion Factor

## **Operating Income Adjustments**

Mr. Kiger sponsors the following necessary rejoinder adjustments to operating income in all districts, except where noted:

- Adjustment MHK-1RJ Correct Test Year Revenues (Mohave)
- Adjustment MHK-2RJ Chemicals Expense Annualization (Havasu)
- Adjustment MHK-3RJ Property Taxes

#### SECOND REBUTTAL TESTIMONY

Miles H. Kiger testifies as follows:

#### Rate Design

Arizona-American Water Company ("Arizona-American" or "the Company") opposes Staff's proposed rate design because it unnecessarily pushes revenue recovery farther into the variable portion of the rate charges and adds additional risk to revenue recovery that is unacceptable.

#### **Residential Small Meter Parity Proposal**

Arizona-American proposes to reduce the basic service charge for residential 1" metered service and to consequentially raise the proposed basic service charges for all other customers in order to bring greater parity between it and the residential 1" and the residential 5/8" basic service charge.

## Page 6

# **Proposed Havasu Private Fire Rates**

Arizona-American proposes Havasu private fire rates for this district.

## **Proposed Rate Increase Request**

Arizona-American's second rebuttal proposed rate increase request is:

District	Agua Fria Water	Havasu Water	Mohave Water	Total
Proposed Rate Increase Req.	\$16,876,758	\$699,327	\$2,165,853	\$19,741,938

## **Adjusted Operating Income**

Arizona-American's second rebuttal position for Adjusted Operating Income is:

District	Agua Fria Water	Havasu Water	Mohave Water
Adjusted TY Operating Income	\$119,758	(\$151,134)	(\$43,553)

# **Adjusted Operating Expense**

Arizona-American's second rebuttal position for Adjusted Operating Expense is:

District	Agua Fria Water	Havasu Water	Mohave Water
Adjusted TY Operating Expense	\$24,077.745	\$1,422,840	\$5,348.145

#### **Sponsored Second Rebuttal Schedules**

Mr. Kiger sponsors the following schedules for each district in the case:

• Schedule C-1 Second Rebuttal – Arizona-American Adjusted Test Year Income Stmt

#### Page 7

- Schedule C-2 Second Rebuttal Arizona-American Income Stmt Pro Forma Adjs
- Schedule H-1 Second Rebuttal Summary of Revenues by Customer Classification -Present & Proposed Rates
- Schedule H-2 Second Rebuttal Analysis of Revenue by Detailed Class
- Schedule H-3 Second Rebuttal Changes in Representative Rate Schedules
- Schedule H-4 Second Rebuttal Typical Bill Analysis

#### **Operating Income Adjustments**

Mr. Kiger sponsors the following necessary rejoinder adjustments to operating income in all districts, except where noted:

- Adjustment MHK-1RB2 Add Test Year Unknown Meter Revenue (Agua Fria)
- Adjustment MHK-2RB2 Add Test Year Private Fire Revenue (Havasu)

Mr. Kiger will adopt portions of the pre-filed direct testimony of Linda J. Gutowski, as follows:

<u>Purchased Water Expense Adjustment</u> LJG-2 adjusts Agua Fria, Havasu, and Mohave districts for the costs of purchased water. For the Agua Fria Water district, part of the adjustment is to include additional purchased water costs for the White Tanks Treatment Plant.

<u>Chemicals Expense Adjustment</u> LJG-3 adjusts all districts to the latest chemical prices, a number of which have decreased.

Management Fees Expense Adjustments LJG-4, LJG-5, and LJG-6 adjust all districts for changes in Management Fees related to Labor Expenses, related to Other Expenses, and related to the removal of One Time Charges.

Water Testing Expense Adjustment LJG-16 adjusts all districts for the costs for water testing.

<u>Tank Maintenance Expenses Adjustment</u> LJG-17 adjusts all districts for the estimated average costs to paint tanks in the districts over the next several years.

#### Testimony Summary for Dr. Bente Villadsen:

## DIRECT TESTIMONY

Dr. Bente Villadsen, a Principal at *The Brattle Group*, files testimony on the cost of capital for Arizona-American Water Company's Agua Fria Water, Havasu Water and Mohave Water Districts.

Dr. Villadsen selects two benchmark samples, water utilities and gas local distribution companies (LDC). For the water sample, she primarily relies on a sub-sample that excluded Southwest Water which recently restated its financials and currently pays no dividends. Using two versions of the Discounted Cash Flow (DCF) method and three versions of the Capital Asset Pricing Model (CAPM), she estimates the sample companies' after-tax weighted-average cost of capital. The after-tax weighted average cost of capital is the measure that companies most commonly use to evaluate investments and the measure recommended in standard financial textbooks. Textbooks, the academic literature as well as businesses weigh debt and equity by the market values in determining the after-tax weighted cost of capital. \(^1\)

Having estimated the samples' after-tax weighted-average cost of capital for the samples, she determines the corresponding cost of equity for Arizona-American Water at its target of approximately 45 percent equity. In undertaking her analysis, Dr. Villadsen notes that the overall cost of capital is constant within a broad middle range of capital structures although the distribution of costs and risks among debt and equity holders is not. Because the overall cost of capital is the same in a broad range of capital structures, there are no impacts on the rates customers pay from a higher or lower percentage of equity, so ratepayers are not affected by the choice of capital structure within a broad range. However, Arizona-American Water's capital structure includes only 45 percent equity, which is lower than the percentage equity among many utilities. Therefore, its financial risk is higher and the return required by investors' increases with the level of risk they carry, but this return is paid on a smaller amount of equity than is typical in the water industry. Therefore, the dollar amount paid by customers is the same as if the Company had a lower return on equity but a higher equity percentage.

Dr. Villadsen discusses the impact of the recent recession and ongoing turmoil in financial markets on utilities' cost of capital and notes that while the yield on government issued bills and bonds is currently very low, the spread between the yield on investment-grade utility bonds and government bonds is currently unusually high. As utilities cannot raise debt (or equity) at the same rates as the government, it is necessary to take the yield on investment grade utility bonds into account in assessing the cost of capital for Arizona-American Water. Specifically, the yields on government bills and bonds have been driven artificially down by monetary policy and a flight to safety, so that the yields on these securities are not reflective of normal economic conditions. Consequently, Dr. Villadsen bases her CAPM models on a normalized risk-free rate which consists of the observed risk-free rate plus an adjustment for the increase in the spread between risk-free rates and investment grade utility bond yields. Further, equity investors lost substantial value in capital markets over the couple of years and stock prices

<sup>&</sup>lt;sup>1</sup> For example, the Hamada article relied upon by Commission Staff in past proceedings uses market value capital structures.

## Testimony Summary for Dr. Bente Villadsen:

#### Page 2

have been extremely volatile. As a result, investors risk aversion has increased and the premium they require to invest in stocks going forward has increased. Therefore, the risk premium associated with equity investments is currently higher than it has been in the recent past. Dr. Villadsen performs several sensitivity analyses on the impact hereof, but the requested return on equity is fully supported by her baseline analysis, which relies on a historical market risk premium. In other words, her recommended return on equity does not include the current higher risk premium making her recommendation conservative in the current economic environment.

In addition to the cost of capital estimation discussed above, Dr. Villadsen reviewed data on Arizona-American Water's earned return over the past 10 years and data on Arizona-American Water's current credit ratios. Both the inability to earn the allowed return on equity and the credit ratios show that it is vital that Arizona-American Water be allowed an opportunity to earn a reasonable return on equity that would support as the bare minimum an investment grade credit rating on a stand alone basis. Further, Dr. Villadsen reviewed 22 recent decisions by the Arizona Corporation Commission to assess the reasonableness of Arizona-American Water's current request. When compared in terms of the overall return, the cost of equity requested by Arizona-American Water in this proceeding is comparable to that granted to other water and wastewater utilities in Arizona as adjusted using Arizona-American's equity percentage.

Lastly, the industry needs to invest in wastewater collection and treatment. The needed infrastructure investment requires substantial external financing (i.e., new debt and equity) and access to capital requires that investors expect to earn their required return. Failure to provide adequate returns may discourage potential investors. While it may seem counterintuitive to increase the cost of capital at a time when the economy is performing poorly, it is necessary to attract needed capital. The increase in the spread between utility bond yields and government bond yields along with the fact that investors are holding onto their funds, are indicators that the required return has increased. Thus, in order to attract investments, investors need to expect that they can earn a return on their investment that makes it worth the risk and that return is higher than prior to the financial crisis. The fact that Arizona-American Water has been unable to earn its allowed return since 2000 and on a stand alone basis has weak credit ratios makes the attraction of capital especially difficult for Arizona-American Water. These factors indicate that investors expect a higher risk premium for investing in equity than prior to the financial crisis and that Arizona-American Water face additional challenges in raising capital.

Based on the evidence from the samples, Dr. Villadsen finds that Arizona-American Water's request for 11.50% return on equity is reasonable and fully supported by her analysis. The financial turmoil has made the range of a reasonable return on equity wider and especially the water sample shows a wide range from approximately 10½ to 14½%, although the risk positioning results are in a narrower range from 11¼ to 12. The gas LDC sample's results are concentrated in the range of 11 to 12%. Based on the data and the analysis of Arizona-American Water's credit metric and the returns allowed other water utilities, I support the request for an allowed return on equity of 11.50%.

#### REBUTTAL TESTIMONY

Dr. Villadsen rebuts the cost of capital testimony provided by Staff witness, Juan Manrique, RUCO witness, William Rigsby, and Sun City Grand Community Association witness, Michael Arndt.

Dr. Villadsen also testifies regarding the implication to Arizona-American of the low returns recommended by these parties.

# **Testimony Summary for Dr. Bente Villadsen:**

## Page 3

# **REJOINDER TESTIMONY**

Dr. Villadsen rebuts the cost of capital surrebuttal testimony provided by Staff witness, Juan Manrique, RUCO witness, William Rigsby, and Sun City Grand Community Association witness, Michael Arndt.

Dr. Villadsen also provides an update of previously submitted tables summarizing past decisions by the Arizona Corporation Commission.

## Testimony Summary for John F. Guastella:

#### **DIRECT TESTIMONY**

Mr. Guastella testifies as follows:

The purpose of the Depreciation Study is to establish depreciation rates that are reasonably applicable to the depreciable assets of the water and wastewater systems of the Company. The Depreciation Study was performed on the basis of comparative average service lives and depreciation rates.

The source data relied upon with respect to average service lives was obtained from Guastella Associates' files and from data provided by the Company with respect to its Arizona and other American Water properties and by the Arizona Corporation Commission Staff.

The basis for average service lives resulted from a careful account-by-account review of average service lives that have been established by utilities and regulatory agencies around the country. Mr. Guastella also inspected a number of the Company's systems in Arizona, and discussed their operation and maintenance with Company engineers and operators. Mr. Guastella also discussed the Company's asset management with its accountants and administrative employees.

Having selected the average service lives, the next step was to assign net salvage values to each account. Under the required accounting treatment, it is necessary to determine the net salvage value with respect to an item of property being retired. The calculation of depreciation rates also requires the inclusion of net salvage values. Estimates of positive salvage values, such as trade-in payments or discounts, or resale values on meters and transportation equipment are fairly consistent. On the other hand, determining the cost of removal is more challenging for assets being retired as part of a replacement during a common project and, therefore, requiring an allocation of costs.

Having selected average service lives and net salvage values, the determination of depreciation rates is simply a matter of arithmetic: the percent depreciation is 1.0 minus percentage net salvage value divided by the average service life. Accordingly, where the net salvage value is negative, indicating cost of removal exceeds the salvage value, the depreciation rate is higher -- because it must recover both the original cost and cost of removal.

#### REBUTTAL TESTIMONY

Mr. Guastella rebuts the testimony of Mr. Becker and Mr. Arndt relating to the Company's depreciation study

#### **REJOINDER TESTIMONY**

Mr. Guastella provides rejoinder to the surrebuttal testimony of Mr. Arndt and Mr. Simer relating to the Company's proposed depreciation rates.

# **Testimony Summary for Kevin Tilden:**

# **DIRECT TESTIMONY**

Kevin Tilden testifies regarding the Company's noticing error in the Agua Fria District and the measures being taken to ensure that it does not occur again. He also confirms that this error did not affect the billing determinants used in this case.

# **Testimony Summary of Gregory A. Barber:**

# **REJOINDER TESTIMONY**

Mr. Day responds to the surrebuttal testimony of RUCO witness Rodney Moore and describes the financial impact of RUCO's proposed disallowance of fifty percent of the cost of the White Tanks Plant from the rate base and fifty percent of the deferred debits associated with the proposed fifty percent disallowance.

#### Testimony Summary for Troy Day:

#### REBUTTAL TESTIMONY

Troy Day testifies that Arizona-American actively incorporates water loss reduction efforts in its day to day operation and its routine maintenance of all its water systems. Arizona-American has developed non revenue water (NRW) plans for all its water districts and has completed significant work towards reducing NRW. Arizona American asserts that it is in compliance with ACC Decision number 71410 that required the Company to reduce its water loss in the Mohave and Havasu water districts to less than 10% or formulate a plan to reduce water loss to less than 10%.

Arizona-American has made significant prudent efforts to reduce its NRW in all districts. While there has been much progress, there is still more that can be done. Arizona-American believes it has struck the appropriate balance in this effort to reduce water loss but not cause significant expenses that would be passed on to customers.

## **REJOINDER TESTIMONY**

Mr. Day responds to the surrebuttal testimony of Staff witness Dorothy Hains regarding water loss in the Mohave and Havasu Water Districts.

#### SECOND REBUTTAL TESTIMONY

Troy Day testifies that Arizona American Water has continued to work on water loss as per the Non Revenue Water plans that were submitted to Commission Staff. The testimony here is an update of work completed since the August 2011 submittal.